

Last Revision: 1/26/04

ORDINANCE NO. 03-____

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF LEON COUNTY, FLORIDA, AMENDING CHAPTER 10, LAND DEVELOPMENT CODE, OF THE LEON COUNTY CODE OF LAWS RELATING TO THE ENVIRONMENTAL MANAGEMENT ACT (EMA); AMENDING SECTION 10-190, WATER QUALITY TREATMENT; AMENDING SECTION 10-191, WATERSHED CONSERVATION MEASURES; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEON COUNTY, FLORIDA, that:

Section 1. Section 10-190 of Chapter 10 of the Code of Laws of Leon County, Florida, is hereby amended as follows:

Sec. 10-190. Water quality treatment.

(a) Water quality treatment shall be provided as a part of all development activity which requires a stormwater application under this article. At a minimum, Treated stormwater shall meet the applicable water quality standards set forth in F.A.C. chs. 62-4, 62-302, 62-520, 62-522, 62-550 and 62-25, and in this division. Design and performance standards set forth in such F.A.C. chapters are hereby adopted and incorporated in this article by reference. However, design and performance standards more stringent than those specified therein may be required whenever discharge from a site does not meet state water quality standards, and may also be required for specific watersheds for which the for purposes of preserving water quality as adopted by the Board of County Commissioners has adopted, or shall adopt, conservation measures.

(b) Volume control is required. Runoff volumes in excess of the pre-development runoff volume shall be retained for all storm events up to a 100-year, 24-hour duration storm, except that the excess volume may be discharged from individual sites to an approved regional retention facility as may be allowed pursuant to section 10-189.

(1) Drawdown requirements:

a. One-half the required pond volume shall be recovered within 7 days, and the full volume shall be recovered within 30 days.

b. Regardless of the method of volume recovery, the entire retention volume must recover within the time frame established above unless an approved continuous analysis, using Tallahassee Airport rainfall data from

c. January 1, 1959 to December 31, 1998, demonstrates that the total volume retained within the stormwater system over the forty year period is greater than or equal to that retained by a dry retention system as set forth in subsection (b) based on the above described recovery times.

(2) For calculating the treatment volume required for pervious pavements and graveled areas, initially such surfaces shall be assumed to be 100 percent impervious, then deductions in the required treatment volume for such areas can be taken that is equivalent to:

a. The porosity of the pavement material times the thickness of the paving material times a safety factor of 0.5.

b. If, and only if, the soils immediately underlying the pavement for a depth of 18 inches have a permeability of 3 inches per hour or greater, as demonstrated by onsite percolation tests, then a further deduction can be taken equivalent to the porosity of the soil strata times 4 inches times a safety factor of 0.5.

The above deductions will be allowed provided that the applicant specifically commits, in his Stormwater Operating Permit, to regularly sweep/vacuum the area covered with pervious pavement and to verify the pavement's percolation capacity when the Operating Permit is renewed.

(3) Where volume recovery is to be by percolation, groundwater mounding calculations to demonstrate recovery of the retention volume pursuant to the requirements set forth in subsection (1) above shall be required unless the applicant conclusively demonstrates by other engineering methods that pond recovery will not be adversely affected by an elevated groundwater table. If the bottoms of all retention areas intended to percolate stormwater are shown by soil borings to be less than 3 feet above the historical wet-season high water table, a mounding analysis shall be required.

(4) Where volume recovery is to be by irrigation, the rate of land application shall not exceed 1.5 inches per week unless the applicant can conclusively demonstrate that the on-site soil conditions and vegetation warrant a higher application rate. Under no circumstances shall irrigation water be allowed to discharge from the irrigation site.

(5) Facility design standards.

a. Facility Configuration: All on-line facilities shall have a flow-path-length to flow-path-width ratio of 2:1 or greater. The inlets and outlets shall be on opposite ends of the facility. If this is not possible, the effective flow length shall be increased by adding diversion barriers within the facility as necessary to provide this minimum flow length.

- 1 b. Retention ponds/areas shall have 4H:1 V maximum side slopes on a sufficient
2 length of the perimeter to allow adequate maintenance access to the bottom
3 of the facility. If any of the side slopes are steeper than this, a security fence
4 shall be placed completely around the perimeter of the facility and located
5 exterior to the maintenance access ways. The fence shall not be required if
6 the pond depth is less than 18 inches.
- 7 c. Retention facilities shall have flat bottoms in order to maximize the surface
8 area for percolation.
- 9 d. Maintenance access requirements:
- 10 1. For every facility, the owner or developer shall provide, at a
11 minimum, a 15 feet wide clear and stable access to the facility from
12 the nearest "public" right-of-way or road. Such access shall be
13 evidenced by a recorded reservation or grant of an easement, which
14 shall run with the land, to the benefit of the County.
- 15 2. For retention facilities with an overall depth greater than 18 inches,
16 provide, at a minimum, a 15 feet wide clear, level and stable access
17 around a sufficient portion of the perimeter of the facility, that is
18 inside of any fences and external to the top-of-bank of the facility, to
19 allow adequate maintenance from dry land. For retention facilities
20 with an overall depth of 18 inches or less, provided the facility has
21 side slopes of 4 horizontal to 1 vertical (or less) on at least one side
22 of the facility, the applicant can provide the above access on the
23 sloped side of the facility only. Any access required by the provisions
24 of this subsection shall be evidenced by a recorded reservation or
25 grant of an easement, which shall run with the land, to the benefit of
26 the County.
- 27 3. The minimum inside radiuses of all access ways shall be 20 feet.
- 28 4. Adequate access for both personnel and mechanized equipment shall
29 be provided to all inlet and outlet structures.
- 30 5. If Leon County is proposed to be the maintenance entity for any
31 stormwater management facility permitted under this section, either
32 by dedication, or by reservation of an easement, or by any other
33 process, the applicant shall submit the engineering design for the
34 facility directly to the Leon County Department of Public Works for
35 its review and approval as to the adequacy of maintenance access to
36 the facilities. An environmental permit shall not be issued until the
37 applicant demonstrates, in writing, the approval of the Department of
38 Public Works.

e. Skimmer/trash rack requirements:

1. Trash/leaf traps with easy maintenance access shall be provided at key inlets and all outlets from a facility unless the applicant can conclusively demonstrate that it is not possible.
2. All outlet structures shall have an oil skimmer that extends above and below any outlet structure opening.

f. Energy dissipation requirements:

1. Energy dissipation devices sufficient to prevent erosion and resuspension of loose sediments shall be placed on all inlets to retention facilities.
2. Energy dissipation devices sufficient to prevent downstream channel erosion shall be placed at the outlets of all retention facilities.

g. Stabilization of stormwater treatment facilities:

All berms and side slopes shall be stabilized with pinned sod. Pond bottoms can be seeded and mulched. Restabilization by the contractor or owner shall be necessary until such time that the sod is fully rooted and otherwise well established.

h. Rate control in Section 10-208(1) is required after the water quality treatment within this section is fully satisfied prior to any overflow/discharge from the facility. The conveyance analysis and restricted discharge requirements in Section 10-208(15) will not be required if the stormwater management facility is designed in accordance with this section.

- (6) It shall be presumed that a volume control stormwater management facility will require no more than 10 percent of the total area of the development site. If, however, the applicant can demonstrate with engineering calculations that this area is insufficient to achieve compliance with volume control provisions within this section, a portion of the site's required natural and/or landscape area may be converted for stormwater management uses. Only the additional area demonstrated as being necessary to achieve full compliance with volume control provisions, but in no case more than an additional 10 percent of the total area of the site, may be converted from any combination of the 25% landscape area requirements in Section 10-257 and the 25% natural area requirements in Section 10-258. Any reduction toward the natural area requirement can only occur if the natural area does not contain a conservation or preservation area identified in Section 10-346.

Section 2. Section 10-191 of Chapter 10 of the Code of Laws of Leon County, Florida, is hereby amended as follows:

Sec. 10-191. Watershed conservation measures.

(a) Conservation measures designated. The Board of County Commissioners hereby adopts the following conservation measures to be applied in the Lake Jackson, Bradford Brook Chain-of-Lakes, Fred George, Lake McBride, Lake Lafayette, and Lake Iamonia watersheds for the protection of water quality, fish, wildlife, and the aquatic ecosystem of those drainage basins. The Board of County Commissioners may adopt additional conservation measures to provide such protection for other receiving water bodies and associated surface water drainage basins in the county.

~~(b) Stormwater treatment. The following are minimum acceptable methods for stormwater treatment, provided that the discharges meet state water quality criterion. More stringent treatment methods may be required by the director if discharges fail to meet state water quality standards:~~

	Method	Treated Volume
(1)	Wet detention	Wet detention treatment volume shall be, at a minimum, the runoff from the first three inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 1 ½ inches of runoff. The top one-half of the treatment volume must be discharged in 60 hours. Subsequently, the bottom one-half of the treatment volume must be discharged in 60 hours or more.

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(2)	Off-line retention	Off-line retention treatment volume shall be provided equal to 50 percent of the runoff from the first 3.0 inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 3/4 inch of runoff. The full treatment volume shall again be available within 72 hours following a storm event, with appropriate on-site soils tests submitted to verify the infiltration rate.
(3)	On-line retention or underdrained filtration	For on-line retention or detention with underdrained filtration, treatment volume shall be provided equal to 75 percent of the runoff from the first 3.0 inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 1.125 inches of runoff. For the filtration option, only bottom underdrain systems planted with grass that are capable of recovering the treatment volume within 36 hours shall be allowed, unless an alternative system is shown by the applicant, to the satisfaction of the director, to exceed the capabilities of such a bottom underdrain system.

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(4)	Swales	Swale treatment volume shall be percolation of 80 percent of runoff from a three-year one-hour (2.6 inches) storm event. Calculations demonstrating percolation of this volume within the swale within 72 hours shall be submitted with the permit application.
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The drainage area for determining treatment volumes shall include all areas draining to the facility (on-site and off-site):

(c) ~~Special site constraints.~~ If site constraints require another method of water quality treatment, such other method may be approved by the director if such method provides a level of treatment equivalent to off-line retention as specified in subsection (b)(2), and is specifically authorized by the State Department of Environmental Protection:

(d)(b) *Best management practices.* The following best management practices, at a minimum, shall be required in conjunction with all new development and redevelopment, and shall be adhered to by all property owners, located within the Lake Jackson, Bradford Brook Chain-of-Lakes, Fred George, Lake McBride, Lake Lafayette and Lake Iamonia special development zone. All site and development plans submitted for approval shall specifically include the requirement of compliance with these best management practices. The best management practices shall be specifically set forth within, and made a part of, the restrictive covenants for all subdivisions approved by the local government and such restrictive covenants shall be recorded with the plat. All environmental management permits issued for development activities within the Lake Jackson, Bradford Brook Chain-of-Lakes, Fred George, Lake McBride, Lake Lafayette or Lake Iamonia special development zone shall include the requirement of compliance with these best management practices as a condition of such permit:

- (1) Buffering, which may include vegetated berms along the lower contours of lots, so as to provide or improve wildlife habitat and to improve water quality. Berms or buffers shall be vegetated with natural indigenous vegetation suitable for soil and hydrology of the site.
- (2) Restricted use of pesticides, herbicides, and fertilizers to those materials which have rapid decomposition characteristics, are labeled for aquatic use, and are used at the lowest possible label rates. Fertilizer constituents should have at least 50 percent slow release characteristics, be applied at the lowest labeled rate per application, be a non-phosphorous or low phosphorous analysis, and be formulated for good slope retention characteristics.

- (3) Preservation or revegetation of natural wetlands, floodways and watercourses.
- (4) Use of native, low-fertilization, and low-maintenance vegetation.
- (5) Regular maintenance and upgrading, as necessary, of septic tanks and approved discharges from washing machines and garbage disposals.
- (6) Soil conservation service approved conservation practices, including erosion and sediment control and water quality practices for all agricultural operations.

(Ord. No. 92-3, § 1(7-16), 1-28-92; Ord. No. 95-14, § 7, 9-12-95)

Section 3. Conflicts

All ordinances or parts of ordinances in conflict with the provisions of the Ordinance are hereby repealed to the extent of such conflict, as of the effective date of this Ordinance, except to the extent of any conflicts with the Tallahassee-Leon County Comprehensive Plan, as amended, which provisions shall prevail over any parts of this Ordinance which are inconsistent, either in whole or in part, with the Comprehensive Plan.

Section 4. Severability

If any section, subsection, sentence, clause or phrase of this Ordinance is, for any reason, held to be invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and, such holding shall not affect the validity of the remaining portions of this Ordinance.

Section 5. Effective Date

This ordinance shall have effect upon becoming law.

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2 DULY PASSED AND ADOPTED BY the Board of County Commissioners of Leon County,
3 Florida, this ____ of ____.

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5
6 LEON COUNTY, FLORIDA

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8 BY: _____
9 JANE SAULS, CHAIRMAN
10 BOARD OF COUNTY COMMISSIONERS
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14 ATTEST:
15 BOB INZER, CLERK OF THE COURT
16 LEON COUNTY, FLORIDA
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BY: _____

APPROVED AS TO FORM:
LEON COUNTY ATTORNEY'S OFFICE

BY: _____
HERBERT W.A. THIELE, ESQ.
COUNTY ATTORNEY